Governmental Activities of Japan (FY 2007)

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Ministry of Economy, Trade and Industry (METI)

- •ELF-EMF (Electric utility equipment only)
 - ①information dissemination (website, symposia, pamphlets)
- 2 exposure measurement (near utility equipment)
- 3 survey of exposure mitigation measurement
- 4 research on precautionary approach

Ministry of the Environment

• ELF-EMF (residential)

Ministry of Internal Affairs and Communications (MIC)

- -RF-EMF
- ①setting guideline (RF: equivalent to ICNIRP)
- ②epidemiology study, in-vivo/in-vitro study, human volunteer study, dosimetry study
- ③information dissemination (website, symposia, pamphlets)

Interministerial committee

Secretariat: Ministry of the Environment

Ministry of Health, Labour and Welfare

• ELF/IM/RF-EMF

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

• ELF-EMF

Ministry of Land, Infrastructure and

Transportudy (SF/ELF: Electric train)

Actions of Ministry of Economy, Trade and Industry in Connection with EMF Produced by Power Facilities

Japan's regulations concerning power frequency EMF

The Nuclear and Industrial Safety Agency (NISA) of the Ministry of Economy, Trade and Industry (METI) is responsible for electric power facilities. Regulation of 3 kV/m electric field strength beneath high voltage power transmission lines was enacted in 1976 as the Ministerial Ordinance of Standards for Electrical equipment. This clause is not intended to protect human health but to avoid electric shock, which might be caused by electric fields.

NISA organized a Working Group to review regulatory policy and related measures which should be taken for general public, concerning EMF associated with electric transmission lines or other utility electric facilities. The 12-member Working Group, comprising well-informed persons from academia, industry and consumer group, has compile report on the issue on December. 20, 2007, based on the review of, WHO Fact Sheet No. 322, WHO ELF EHC Vol. 238, international guidelines and scientific findings in and outside the country.

The Working Group advising the METI has proposed that Japan should build a public "EMF information center" to educate and inform citizens about EMF issues. In addition to building an EMF information center, Japan should adapt to the ICNIRP exposure guidelines for power-frequency MF and improve EMF research to explore the discrepancy between animal data and epidemiologic studies of childhood leukemia risk and magnetic field exposure.

Actions of Ministry of The Environment

The ministry of the Environment is arranging for a full translation of the WHO ELF EHC monograph Vol. 238 into the Japanese language.

Actions of Ministry of Internal Affairs and Communications to protect the human body from radio-wave radiation

Promotion of the investigation on the effect of radio waves on the human body

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In order to scientifically clarify the effects of radio waves on the human body, research on biological safety evaluation is being promoted.

1. Committee to promote research on the possible biological effects of electromagnetic fields

"Committee to promote research on the possible biological effects of electromagnetic fields", comprised of medical and engineering researchers (Chairman: Shogo Ueno, Professor of the University of Kyushu) met fiscal year 1997 to implement studies on biological safety evaluation using animal experiments.

This committee had made the finding report for ten years (FY1997-2006) on 27th April 2007.

2. Major activities

Promotion of studies since FY2007

1	Effect of electromagnetic field exposure from mobile phone handset: Does it differ between subjects with mobile phone related symptoms and those without? –A population-based questionnaire survey in Japan-
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2	Effects of electromagnetic field emitted from cellular phones on saccades in humans
3	Epidemiological Study on Mobile Phone Use and Health among Children and Adolescents
4	Effects of multigenerational exposure to electromagnetic field on development and function of the brain in rats
5	Assessment of the validity of the Japanese guidelines for limiting exposure up to 3-300 GHz (10mW/cm2):wide-ranging millimeter and quasi- millimeter exposure to eyes
6	Effects of local exposure to 1,457 MHz electromagnetic field under high intensity conditions on cerebral blood flow in the rat brain
7	Influence of microwave exposure on neuroglial cells in the rat brain
8	Cellular and Molecular Effects of High-frequency Electromagnetic Fields
9	Development of millimeter-wave exposure setup for in vitro study: Exposure assessment method and measurement of electrical constants of the medium.
10	Whole-body average SAR and body-core temperature elevation in child models for far-field exposures
11	Experimental evaluations of the relationship between the electromagnetic field strength reference levels and the basic restriction based on whole-body averaged SAR in the radio-frequency protection guidelines of Japan

International collaborations

- -- Collaboration with international organizations such as the World Health Organization (WHO).
- -- Collaboration and cooperation with other countries (US, EU, Korea, etc.) through expert meetings.